## DATA ITEM DESCRIPTION

1. TITLE

2 IDENTIFICATION NUMBER

## COMPUTER OPERATION MANUAL (COM)

DID-FAA-026-20

- 3.1 The Computer Operation Manual (COM) provides information needed to operate a given computer and its peripheral equipment. This manual focuses on the computer itself, not on particular software that will run on the computer.
- 3.2 The COM is intended for newly developed computers, special-purpose computers, or other computers for which commercial or other operation manuals are not readily available.

  4. APPROVAL DATE (YYMMDD) | 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) | 6a. DTC | 6b.

6a. DTC APPLICABLE 6b. GIDEP APPLICABLE N/A N/A AIO-2/ASU-500 August 11, 2000

- 7. APPLICATION/INTERRELATIONSHIP
  7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.
- 7.2 This DID is used when the developer is tasked to identify and record information needed to operate the computer(s) on which software will run.
- 7.3 The Contract Data Requirements List (CDRL) (DD 1423 or equivalent) should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software): may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

9a. REFERENCES 8. APPROVAL LIMITATION 9b. AMSC NUMBER NONE FAA-STD-026 N/A

10. PREPARATION INSTRUCTIONS

- 10.1 General instructions.
  - a. Automated techniques. Use of automated techniques is encouraged. The term "document" In this DID means a collection of data regardless of its medium.
  - b. Alternate presentation styles. Diagrams, tables, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.

(Continued on Page 2-4)

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

## 10. PREPARATION INSTRUCTIONS -- 10.1 General Instructions (continued)

c. <u>Title page or identifier</u>. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

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- d. <u>Table of contents and index</u>. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix, and an index providing an alphabetic listing of key terms and concepts covered in the document and the pages or paragraphs in which the terms or concepts are covered. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.
- e. <u>Page numbering/labeling</u>. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.
- f. <u>Response to tailoring instructions</u>. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.
- g. <u>Multiple paragraphs and subparagraphs</u>. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.
- h. <u>Standard data descriptions</u>. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.
- i. <u>Substitution of existing documents</u>. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.
- 10.2 <u>Content requirements</u>. Content requirements begin on the next page. The numbers shown designate the paragraph numbers to be used in the document. Each such number is understood to have the prefix "10.2" within this DID. For example, the paragraph numbered 1.1 is understood to be paragraph 10.2.1.1 within this DID.

- 10. PREPARATION INSTRUCTIONS -- 10.2 Content Requirements (continued)
- 1. Scope. This section shall be divided into the following paragraphs.
  - 1.1 <u>Identification</u>. This paragraph shall contain the manufacturer's name, model number, and any other identifying information for the computer system to which this COM applies.
  - 1.2 <u>Computer system overview</u>. This paragraph shall briefly state the purpose of the computer system to which this COM applies.
  - 1.3 <u>Document overview</u>. This paragraph shall summarize the purpose and contents of this manual and shall describe any security or privacy considerations associated with its use.
- 2. <u>Referenced documents</u>. This section shall list the number, title, revision, and date of all documents referenced in this manual. This section shall also identify the source for all documents not available through normal Government stocking activities.
- 3. <u>Computer system operation</u>. This section shall be divided into the following paragraphs. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.
  - 3.1 <u>Computer system preparation and shutdown</u>. This paragraph shall be divided into the following subparagraphs.
    - 3.1.1 <u>Power on and off</u>. This paragraph shall contain the procedures necessary to power-on and power-off the computer system.
    - 3.1.2 <u>Initiation</u>. This paragraph shall contain the procedures necessary to initiate operation of the computer system, including, as applicable, equipment setup, pre-operation, bootstrapping, and commands typically used during computer system initiation.
    - 3.1.3 <u>Shutdown</u>. This paragraph shall contain the procedures necessary to terminate computer system operation.
  - 3.2 <u>Operating procedures</u>. This paragraph shall be divided into the following subparagraphs. If more than one mode of operation is available, instructions for each mode shall be provided.
    - 3.2.1 <u>Input and output procedures</u>. This paragraph shall describe the input and output media (e.g., magnetic disk, tape) relevant to the computer system, state the procedures to read and write on these media, briefly describe the operating system control language, and list procedures for interactive messages and replies (e.g, terminals to use, passwords, keys).
    - 3.2.2 <u>Monitoring procedures</u>. This paragraph shall contain the procedures to be followed for monitoring the computer system in operation. It shall describe available indicators, interpretation of those indicators, and routine and special monitoring procedures to be followed.

- 10. PREPARATION INSTRUCTIONS -- 10.2 Content Requirements (continued)
  - 3.2.3 Off-line procedures. This paragraph shall contain the procedures necessary to operate all relevant off-line equipment of the computer system.
  - 3.2.4 Other procedures. This paragraph shall contain any additional procedures to be followed by the operator (e.g., computer system alarms, computer system security or privacy considerations, switch over to a redundant computer system, or other measures to ensure continuity of operations in the event of emergencies).
  - 3.3 <u>Problem-handling procedures</u>. This paragraph shall identify problems that may occur in any step of operation described in the preceding paragraphs in Section 3. It shall state the error messages or other indications accompanying those problems and shall describe the automatic and manual procedures to be followed for each occurrence, including, as applicable, evaluation techniques, conditions requiring computer system shutdown, procedures for on-line intervention or abort, steps to be taken to restart computer system operation after an abort or interruption of operation, and procedures for recording information concerning a malfunction.
- 4. <u>Diagnostic features</u>. This section shall be divided into the following paragraphs to describe diagnostics that may be performed to identify and troubleshoot malfunctions in the computer system.
  - 4.1 <u>Diagnostic features summary</u>. This paragraph shall summarize the diagnostic features of the computer system, including error message syntax and hierarchy for fault isolation. This paragraph shall describe the purpose of each diagnostic feature.
  - 4.2 <u>Diagnostic procedures</u>. This paragraph shall be divided into subparagraphs as needed to describe the diagnostic procedures to be followed for the computer system, including:
    - a. Identification of hardware, software, or firmware necessary for executing each procedure
    - b. Step-by-step instructions for executing each procedure
    - c. Diagnostic messages and the corresponding required action
  - 4.3 <u>Diagnostic tools</u>. This paragraph shall be divided into subparagraphs as needed to describe the diagnostics tools available for the computer system. These tools may be hardware, software, or firmware. This paragraph shall identify each tool by name and number and shall describe the tool and its application.
- 5. <u>Notes.</u> This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of terms and definitions needed to understand this document.
- A. <u>Appendixes</u>. Appendixes may be used to provide information published separately for convenience in document maintenance (e.g., charts, classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).